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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Che-Kuei Mai

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06/24/2009

LIU & LIU

444 S. FLOWER STREET SUITE 1750

LOS ANGELES, CA 90071

EXAMINER

NGUYEN, JIMMY H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/830,206	Applicant(s) MAI, CHE-KUEI	
	Examiner JIMMY H. NGUYEN	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,9-13,16-20,22,23 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9-13,16-20,22,23 and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/23/2009 has been entered. Claims 1, 9-13, 16-20, 22, 23 and 26-29 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9-13, 16-20, 22, 23 and 26-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Okahashi (US 6,473,074 B1).

As to **claims 1, 20 and 29**, Okahashi discloses a first embodiment of a touch panel input device (a coordinate input device 10; see Fig. 1A or 2; col. 4, line 48) comprising:

a contact sensitive panel (Figs. 1A, 2) comprising a first substrate (element 22; Fig. 2; col. 4, lines 56-57) and a second substrate (element 16; Fig. 2; col. 4, lines 34-35) insulated from the first substrate (Fig. 2), wherein the first substrate (22) has a first conductive surface (a resistant film 20; Fig. 2; col. 4, line 58) and the second substrate (16) has a second conductive surface (a resistant film 14; Fig. 2; col. 4, line 55) facing the first conductive surface (20) (Fig.

2), and wherein the first conductive surface and the second conductive surface define an active area (Figs. 1A and 2; col. 6, line 66 through col. 7, line 11);

sensing lines (electrodes 28, 34; Fig. 1A) at the periphery of the active area, which facilitates sensing relative changes in electrical properties arising from user contact within the active area (col. 5, lines 16-44); and

a grounding conductor (ground conductor element 38; Fig. 1A; col. 5, line 46) conductively coupled to the contact sensitive panel outside the active area (Figs. 1A and 2), and configured to be conductively insulated from the sensing lines (28, 34) and the first and second conductive surfaces (20, 14) and conductively coupled to an external ground (a frame ground) (see col. 6, lines 32-36),

Okahashi further teaches that the grounding conductor (38) comprises a first section (a section of ground conductor element 38 around the resistant film 14; Figs. 1A, 2) attached to the contact sensitive panel (Fig. 1A, 2) and a second section (distal ends 38a; Fig. 1A) extending from the first section to the external ground (Fig. 1A; col. 6, lines 32-36).

Okahashi teaches that the first substrate (22) is exposed to contact by a user (col. 6, line 66 through col. 7, line 11), and wherein the grounding conductor (38) is conductively coupled to the first substrate (22) and the second substrate (16) (Fig. 2).

Okahashi further discloses the grounding conductor (38) comprising a first conductive layer (an upper layer/portion of the ground conducting element 38; Fig. 2) on the first substrate (22) on the same side as the first conductive surface (20), a second conductive layer (a lower layer/portion of the ground conducting element 38) on the second substrate (16) on the same side as the second conductive surface (14), wherein the first and second conductive layers are

conductively coupled by a third conductive layer (a middle layer/portion of the ground conductor (Fig. 2). **In other words, the ground conducting member 38 of Okahashi considerably comprises three integrated layers/portions such as an upper layer/portion corresponding to the claimed first conductive layer, a middle layer/portion corresponding to the claimed third conductive layer, and a lower layer corresponding to the claimed second conductive layer (see Fig. 2).**

Regarding to the claimed limitation, “wherein the first and second conductive layers are respectively formed on the first and second substrate along with the first and second conductive surfaces on the first and second substrates” in last two lines of claim 1, Examiner notes that this underlined limitation requires “the first conductive layer is formed on the first substrate along with the first conductive surface on the first substrate” and “the second conductive layer is formed on the second substrate along with the second conductive surface on the second substrate”. As noting in Fig. 2, Okahashi explicitly discloses the first conductive layer (an upper layer of the ground conducting member 38; see the above bold note) formed on the first substrate (22) along with the first conductive surface (20) on the first substrate (22) and the second conductive layer (a lower layer of the ground conducting member 38; see the above bold note) formed on the second substrate (16) along with the second conductive surface (14) on the second substrate (16).

Accordingly, the difference between the first embodiment of the touch panel of Okahashi and the invention of these claims is that the material of the third conductive layer in the first embodiment of Okahashi is the **same** as that of the first and second conductive layers while these

claims require the material of the third conductive layer **different** from that of the first and second conductive layers.

However, Okahashi further teaches another embodiment of the touch panel input device comprising a grounding conductor (54, 64, 68; see Fig. 7B) comprising a first conductive layer (64; Fig. 7B) on the first substrate (22/18b), a second conductive layer (54; Fig. 7B) on the second substrate (16/12b); and a third conductive layer (68; Fig. 7B), wherein the first and second conductive layers (64, 54) are conductively coupled by a third conductive layer (68) and the material of the third conductive layer (68) **different** from that of the first and second conductive layers (64, 54) (col. 7, lines 65-67 teaches the ground conductor may preferably made of Ag-C mixture or another electrically conductive such as aluminum, and col. 10, lines 20-33 teaches the material of the conductive piece (68) different from the material of the ground conductors (54, 64)). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to make the material of the third conductive layer of the first embodiment, different from the material of the first and second conductive layers, in view of the teaching in the another embodiment of Okahashi, because this would improve the reliability and stability of the indirect grounding for the ground conductor element 64 (i.e., the claimed first conductive layer) through the ground conductor element 54 (i.e., the claimed second conductive layer), as taught by the Okahashi reference (see col. 10, lines 41-47).

As to **claims 9 and 11**, Okahashi discloses the grounding conductor (38) comprising a generally loop shaped structure (see Fig. 1A).

As to **claims 10 and 13**, Okahashi discloses the loop extending along the periphery of the contact sensitive panel (Fig. 1A).

As to **claim 12**, Okahashi discloses the generally loop shaped structure being a complete closed loop (Fig. 1A).

As to **claim 16**, Okahashi discloses a display system comprising a touch panel and a display element operatively coupled to the touch panel, wherein locations on an active area of the contact sensitive panel correspond to locations on a display area of the display element (col. 11, lines 28-31). Further, see col. 1, lines 12-23.

As to **claim 17**, Okahashi discloses the display element being a LCD or a CRT (col. 11, lines 28-31).

As to **claims 18 and 19**, Okahashi discloses that a touch sensitive input device can be incorporated in the display such as a LCD or CRT (col. 11, lines 28-31) included in a personal computer, a word processor, or an electronic notebook (i.e., the claimed electronic device) (col. 1, lines 12-23). Further note that a personal computer or notebook computer inherently comprises a device controller coupled to the display system and configured to process data corresponding to an image to be tendered by the display system.

As to **claims 22 and 23**, Okahashi discloses that the first conductive film (a resistance film 20) defines the first conductive surface (Fig. 2; col. 4, line 58) and a second conductive film (a resistant film 14) defines the second conductive surface (Fig. 2; col. 4, line 55).

As to **claims 26 and 27**, see the rejection to claim 1 above.

As to **claim 28**, as discussed in the rejection to claim 20 above, Okahashi discloses the first conductive layer formed on the first substrate and the second conductive layer formed on the

second substrate. Okahashi does not explicitly teach the first conductive layer formed on the first substrate at the same time with and with the same material as the first conductive surface on the first substrate, and the second conductive layer formed on the second substrate at the same time with and with the same material as the second conductive surface on the second substrate, as presently claimed.

However, Applicant explicitly discloses in the specification, page 7, line 25 to page 8, line 23, that:

(i) the first conductive film 12a (corresponding to the claimed first conductive layer) and the top conductive film 12 (corresponding to the claimed first conductive surface) can be formed on the first substrate at the same time and with the same material, and the third conductive film 22a (corresponding to the claimed second conductive layer) and the bottom conductive film 22 (corresponding to the claimed second conductive surface) can be formed on the bottom substrate 20 at the same time and with the same material; and

(ii) by virtue of the ground conductor being made as a single layer conductive structure and being a metal film, such as a silver film, the first conductive film (12a) (corresponding to the “claimed” first conductive layer) can be formed with a material (i.e., a metal film such as a silver film) different from the material of the top conductive film (12) (corresponding to the claimed first conductive surface) at a different time and the third conductive film (22a) (corresponding to the “claimed” second conductive layer) can be formed with a material (i.e., a metal film such as a silver film) different from the material of the bottom conductive film (22) (corresponding to the claimed second conductive surface) at a different time.

Based upon on the above mentioned disclosure, one of ordinary skill in the art would have expected Applicant's invention to perform equally well with different or same materials of the first conductive layer and the first conductive surface, which are formed either at the same or different time and with different or same materials of the second conductive layer and the second conductive surface, which are formed either at the same or different time.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to form the first conductive layer on the first substrate at the same time with and with the same material as the first conductive surface on the first substrate, and to form the second conductive layer on the second substrate at the same time with and with the same material as the second conductive surface on the second substrate, as desired, because the touch panel input device's ability to perform its function of providing electrostatic discharge protection is not effected by the same or different materials of the first conductive layer and the first conductive surface, which are formed either at the same or different time, and by the same or different materials of the second conductive layer and the second conductive surface, which are formed either at the same or different time.

Therefore, it would have been obvious to a person of ordinary skill in this art at the time of the invention was made to modify the Okahashi reference to obtain the invention of this claim.

Response to Arguments

4. Applicant's arguments with respect to the rejections in the Office action dated 12/23/2008, have been considered but are moot in view of the new ground(s) of rejection as discussed above.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JIMMY H. NGUYEN whose telephone number is (571)272-7675. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jimmy H Nguyen/

Primary Examiner, Art Unit 2629